

SS1293

## (12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization International Bureau



(43) International Publication Date  
14 October 2004 (14.10.2004)

PCT

(10) International Publication Number  
**WO 2004/086993 A2**

(51) International Patent Classification<sup>7</sup>: **A61B 18/14** (74) Agent: MORRIS, James, H.; Wolf, Greenfield & Sacks, P.C., 600 Atlantic Avenue, Boston, MA 02210 (US).

(21) International Application Number:

PCT/US2004/009618

(22) International Filing Date: 29 March 2004 (29.03.2004)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:

60/458,489	28 March 2003 (28.03.2003)	US
60/458,490	28 March 2003 (28.03.2003)	US
60/458,491	28 March 2003 (28.03.2003)	US
60/458,643	28 March 2003 (28.03.2003)	US
60/458,856	28 March 2003 (28.03.2003)	US

(71) Applicant (for all designated States except US): **C.R. BARD, INC.** [US/US]; 730 Central Avenue, Murray Hill, NJ 07974 (US).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **STEVENS-WRIGHT, Debbie** [US/US]; 175 Candlestick Road, North Andover, MA 01845 (US). **AMARA, Ryan** [US/US]; 57 Beech Street, Tewksbury, MA 01876 (US). **BROWN, Erik** [US/US]; 10928 SW Collina Avenue, Portland, OR 97219 (US). **MACADAM, David** [US/US]; 5 Cyndy Lane, Millbury, MA 01527 (US).

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

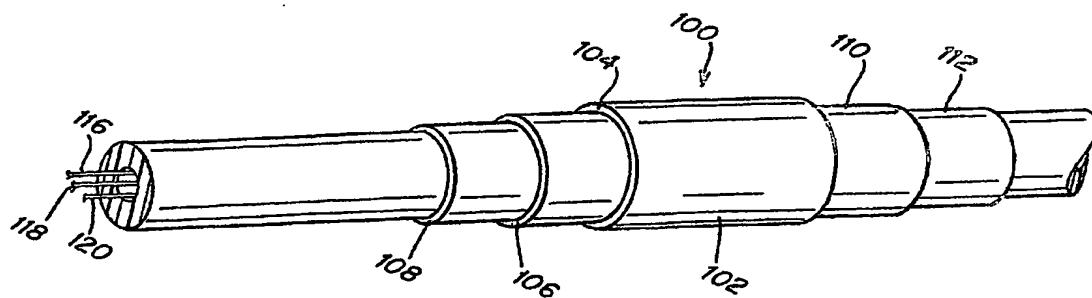
## Published:

— without international search report and to be republished upon receipt of that report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

---

(54) Title: METHOD AND APPARATUS FOR ADJUSTING ELECTRODE DIMENSIONS



**WO 2004/086993 A2**

(57) Abstract: Extendable and expandable ablation electrodes are disclosed. Electrophysiology catheter systems include ablation electrodes that maintain a reduced cross-sectional profile during introduction into a patient and are extendable and/or expandable once positioned at a lesion site. The expanded electrodes having a larger length or and/or diameter can help to produce large lesions. Controllability of the dimensions of the ablation electrodes may be improved.